

Attorney Docket No.: 01CON247P-CON
Application Serial No.: 10/806,800

List of Claims:

Claims 1-29 (Cancelled)

Claim 30 (Currently Amended): A method for use by a first gateway to establish data communication between a first client modem and a second client modem over a packet network, said method comprising:

receiving a call from said first client modem over a first telephone line;

negotiating, in response to said call, over said first telephone line with said first client modem to establish a first physical modem connection between said first client modem and a first gateway modem of said first gateway;

informing a second gateway of said call over said packet network;

establishing a gateway-to-gateway transport link with said second gateway over said packet network;

receiving a first set of data link parameters supported by said first client modem;

receiving a second set of data link parameters supported by both a second gateway modem of said second gateway and said second client modem;

harmonizing a set of data link parameters supported by said first gateway modem with said first set of data link parameters and said second set of data link parameters to determine a final set of data link parameters supported by all of said first client modem, said first gateway modem, said second gateway modem and said second client modem; ~~wherein said harmonizing said set of data link parameters supported by said first gateway with said first set of data link~~

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~~parameters supported by said first client modem is performed by exchanging XID frames
between said first gateway modem and said first client modem;~~

establishing a first data link protocol over said first physical modem connection using
said final set of data link parameters;

wherein data is communicated between said first client modem and said second client
modem over an end-to-end reliable connection between said first client modem at one end and
said second client modem at the other end, wherein said end-to-end reliable connection uses said
final set of data link parameters.

Claim 31 (Previously Presented): The method of claim 30, wherein said second gateway
informs said second client modem of said call over a second telephone line, and wherein said
second gateway modem negotiates with said second client modem over said second telephone
line to establish a second physical modem connection.

Claim 32 (Previously Presented): The method of claim 31, wherein, during said
harmonizing, said second gateway modem establishes a second data link protocol over said
second physical modem connection using said second set of data link parameters.

Claim 33 (Previously Presented): The method of claim 30, wherein said gateway-to-
gateway transport link is an unreliable transport link.

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Claim 34 (Previously Presented): The method of claim 30, wherein said harmonizing to determine said final set of data link parameters includes initiating said first data link protocol and stalling said first data link protocol.

Claim 35 (Previously Presented): The method of claim 34, wherein said first data link protocol is based on ITU V.42 standard.

Claim 36 (Previously Presented): The method of claim 35, wherein said stalling includes transmitting an RNR by said first gateway modem to said first client modem.

Claim 37 (Previously Presented): The method of claim 36, wherein said harmonizing to determine said final set of data link parameters further includes resuming said first data link protocol by transmitting an RR to said first client modem.

Claim 38 (Currently Amended): A first gateway device capable of establishing data communication between a first client modem and a second client modem over a packet network, said first gateway device comprising:

a receiver configured to receive a call from said first client modem over a first telephone line;

a controller configured to negotiate, in response to said call, over said first telephone line with said first client modem to establish a first physical modem connection between said first client modem and a first gateway modem of said first gateway, wherein said controller is further

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configured to inform a second gateway of said call over said packet network and establish a gateway-to-gateway transport link with said second gateway over said packet network;

wherein said controller is further configured to receive a first set of data link parameters supported by said first client modem, and receive a second set of data link parameters supported by both a second gateway modem of said second gateway and said second client modem;

wherein said controller is further configured to harmonize a set of data link parameters supported by said first gateway modem with said first set of data link parameters and said second set of data link parameters to determine a final set of data link parameters supported by all of said first client modem, said first gateway modem, said second gateway modem and said second client modem, and establish a first data link protocol over said first physical modem connection using said final set of data link parameters;

~~wherein said controller is configured to harmonize said set of data link parameters supported by said first gateway with said first set of data link parameters supported by said first client modem by exchanging XID frames between said first gateway modem and said first client modem;~~

wherein data is communicated between said first client modem and said second client modem over an end-to-end reliable connection between said first client modem at one end and said second client modem at the other end, wherein said end-to-end reliable connection uses said final set of data link parameters.

Claim 39 (Previously Presented): The first gateway device of claim 38, wherein said second gateway informs said second client modem of said call over a second telephone line, and

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wherein said second gateway modem negotiates with said second client modem over said second telephone line to establish a second physical modem connection.

Claim 40 (Previously Presented): The first gateway device of claim 39, wherein said controller determines said final set of data link parameters while said second gateway modem establishes a second data link protocol over said second physical modem connection using said second set of data link parameters.

Claim 41 (Previously Presented): The first gateway device of claim 38, wherein said gateway-to-gateway transport link is an unreliable transport link.

Claim 42 (Previously Presented): The first gateway device of claim 38, wherein determining said final set of data link parameters by said controller includes initiating said first data link protocol and stalling said first data link protocol.

Claim 43 (Previously Presented): The first gateway device of claim 42, wherein said first data link protocol is based on ITU V.42 standard.

Claim 44 (Previously Presented): The first gateway device of claim 43, wherein said stalling includes transmitting an RNR by said first gateway modem to said first client modem.

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Claim 45 (Previously Presented): The first gateway device of claim 44, wherein determining said final set of data link parameters by said controller further includes resuming said first data link protocol by transmitting an RR to said first client modem.

Claims 46-55 (Cancelled)

Claim 56 (New): The method of claim 30, wherein said harmonizing said set of data link parameters supported by said first gateway with said first set of data link parameters supported by said first client modem is performed by exchanging XID frames between said first gateway modem and said first client modem.

Claim 57 (New): The first gateway device of claim 38, wherein said controller is configured to harmonize said set of data link parameters supported by said first gateway with said first set of data link parameters supported by said first client modem by exchanging XID frames between said first gateway modem and said first client modem.